

REMARKS

Applicant thanks the Examiner for acknowledging Applicant's claim to foreign priority under 35 U.S.C. § 119(a)-(d), and for confirming that the certified copy of the priority document has been received at the Patent Office.

Drawings:

Applicant thanks the Examiner for indicating that the drawings filed on March 19, 2001 have been approved.

Allowable Subject Matter:

Applicant thanks the Examiner for indicating that claims 17-20 have been allowed, that claims 1-10 would be allowable if claim 1 were amended to address a 35 U.S.C. § 112 rejection (discussed below), and that claims 12, 13, 15 and 16 would be allowable if written to overcome a 35 U.S.C. § 112 rejection of claim 11 (discussed below) and written in independent form.

Claim Rejections:

Claims 1-20 are all of the claims that have been examined in the present application, and currently claims 1-16 stand rejected. Applicant notes that, in the present amendment, claims 11 and 14 have been cancelled.

35 U.S.C. § 112, 2nd Paragraph Rejection - Claims 1-10:

Claims 1-10 stand rejected under 35 U.S.C. § 112, 2nd paragraph as being incomplete for omitting essential elements. Specifically, the Examiner asserts that claim 1 is indefinite for failing to recite "essential steps." Namely, the Examiner asserts that the steps of measuring the temperature and causing the tire to come in contact with a surface should be positively be recited.

Although Applicant disagrees with the Examiner, Applicant has amended claim 1 as shown in the attached Appendix to address the Examiner's concerns, and take the path of least resistance. In view of the amendments to claim 1, Applicant hereby requests the Examiner reconsider and withdraw the above 35 U.S.C. § 112, 2nd paragraph rejection of claim 1, and its dependent claims.

Further, in view of the Examiner's comments regarding the allowability of claims 1-10, Applicant submits that these claims are now in fully allowable condition.

35 U.S.C. § 112, 2nd Paragraph Rejection - Claims 11-16:

Claims 11-16 also stand rejected under 35 U.S.C. § 112, 2nd paragraph as being incomplete for omitting essential elements. Specifically, the Examiner asserts that claim 11 should contain a structural element for forecasting the tire tread wear, as set forth in the preamble.

Although claim 11 has been canceled without prejudice or disclaimer, Applicant notes that its limitations have been incorporated into claims 12-13 and 15-16 (as these claims are written in independent form). In writing claims 12-13 and 15-16 in independent form, Applicant has amended the recitations of original claim 11, and Applicant submits that these amendments adequately address the Examiner's concerns regarding claim 11.

In view of the Examiner's comments regarding claims 12-13 and 15-16, Applicant submits that these claims are also now in allowable condition.

AMENDMENT UNDER 37 C.F.R. § 1.116
U.S. Application No.: 09/810,603

Our Ref.: Q62420
Art Unit: 2859

35 U.S.C. § 102(b) Rejection - Claims 11 and 14:

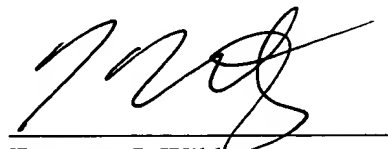
Claims 11 and 14 stand rejected under 35 U.S.C. § 102(b) as being anticipated by the previously applied Williams reference. As previously indicated, Applicant has cancelled claims 11 and 14 without prejudice or disclaimer. As such, Applicant submits that the above rejection is now moot.

Conclusion:

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Terrance J. Wikberg
Registration No. 47,177

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE



23373

PATENT TRADEMARK OFFICE

Date: July 3, 2003

APPENDIX
VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Claims 11 and 14 are canceled.

The claims are amended as follows:

1. (Twice Amended) A tire tread wear forecasting method comprising:
causing a tire to come into contact with, and to be run on, a road surface,
measuring an increase in temperature of a tread surface part of the tire or a temperature of
a tread surface part after increasing the temperature of the tread surface part, and
forecasting tire tread wear on the a tire based on the ~~an~~ increase in temperature of the a
tread surface part of the tire or based on the a temperature of the tread surface part after
increasing the temperature of the tread surface part, ~~by causing the tire to come into contact with,~~
~~and to be run on, a road surface.~~

12. (Amended) A tire tread wear forecasting apparatus that forecasts the tread wear
based on a temperature of a tread surface part of a tire after causing the tire to come in contact
with, and to be run on, a road surface, in order to increase the temperature of the tread surface
part, said tire tread wear forecasting apparatus comprising:
a tire support that supports the tire so that the tire can rotate;
a road surface that contacts the tire;
means for driving at least one of the tire and the road surface in order to cause the tire to
rotate;

means for measuring, without contact, the temperature of the tread surface part and for discerning a temperature distribution of the tread surface part from the measured temperature,

means for forecasting tread wear based on information from said measuring means~~The tire wear forecasting apparatus of Claim 11, and~~

~~comprising~~ a memory device for recording multiple temperature measurement results, and a calculating device for calculating temperature differences of the temperature measurement results from a first temperature measurement and the temperature measurement results from a second temperature measurement at temperature measurement locations.

13. (Amended) A tire tread wear forecasting apparatus that forecasts the tread wear based on a temperature of a tread surface part of a tire after causing the tire to come in contact with, and to be run on, a road surface, in order to increase the temperature of the tread surface part, said tire tread wear forecasting apparatus comprising:

a tire support that supports the tire so that the tire can rotate;

a road surface that contacts the tire;

means for driving at least one of the tire and the road surface in order to cause the tire to rotate;

means for measuring, without contact, the temperature of the tread surface part and for discerning a temperature distribution of the tread surface part from the measured temperature,

means for forecasting tread wear based on information from said measuring means~~The tire wear forecasting apparatus of Claim 11, comprising:~~

an inputter that inputs a length of a tire contact surface; and

a compensator that corrects at least the measured temperature based on the length of the tire contact surface that has been input by the inputter.

15. (Amended) A tire tread wear forecasting apparatus that forecasts the tread wear based on a temperature of a tread surface part of a tire after causing the tire to come in contact with, and to be run on, a road surface, in order to increase the temperature of the tread surface part, said tire tread wear forecasting apparatus comprising:

a tire support that supports the tire so that the tire can rotate;

a road surface that contacts the tire;

means for driving at least one of the tire and the road surface in order to cause the tire to rotate;

means for measuring, without contact, the temperature of the tread surface part and for discerning a temperature distribution of the tread surface part from the measured temperature,

and

means for forecasting tread wear based on information from said measuring means,

and ~~The tire wear forecasting apparatus of Claim 11, comprising~~

means for cooling the tire.

16. (Amended) A tire tread wear forecasting apparatus that forecasts the tread wear based on a temperature of a tread surface part of a tire after causing the tire to come in contact

with, and to be run on, a road surface, in order to increase the temperature of the tread surface

part, said tire tread wear forecasting apparatus comprising:

a tire support that supports the tire so that the tire can rotate;

a road surface that contacts the tire;

means for driving at least one of the tire and the road surface in order to cause the tire to
rotate;

means for measuring, without contact, the temperature of the tread surface part and for
discerning a temperature distribution of the tread surface part from the measured temperature,
and

means for forecasting tread wear based on information from said measuring means,
and~~The tire wear forecasting apparatus of Claim 11, comprising~~

means for heating the road surface.